

## **Wichita County**

## Estimated Economic Impact of Agriculture, Food, and Food Processing Sectors 6/14/2018

Using the most recent IMPLAN data available (2016) adjusted for 2018, 13 agriculture, food, and food processing sectors were analyzed to determine their overall contribution to the Wichita County economy.<sup>1</sup>

These 13 sectors have a total direct output of approximately \$397.2 million and support 429 jobs in Wichita County. Running the model for all 13 sectors simultaneously produces the following results:

Agriculture, Food, and Food Processing Sector Contribution to Overall Wichita County Economy									
Impact Type <sup>2</sup>	Employment	% Employment	Total Value Added <sup>3</sup>	Total Value Added % of Gross Regional Product <sup>4</sup>	Output <sup>5</sup>	Output % of Gross Regional Product			
Direct Effect	428.6	30.74%	\$70,304,729	52.08%	\$397,150,449	294.20%			
Indirect Effect	225.6	16.18%	\$15,911,889	11.79%	\$29,623,064	21.94%			
Induced Effect	89.8	6.44%	\$6,835,140	5.06%	\$12,153,987	9.00%			
Total Effect	743.9	53.37%	\$93,051,757	68.93%	\$438,927,500	325.15%			

As shown in the above table, agriculture, food, and food processing sectors support **744 jobs**, or **53.37%** of the entire workforce in the county. These sectors provide a total economic contribution of approximately **\$438.9** million, roughly **325.15%** of the economy.

Another metric used to calculate the importance of sectors in an economy is their value added as a percentage of GRP. Total value added by the 13 agriculture, food, and food processing sectors is approximately \$93.1 million, or 68.93% of the GRP. This indicates that personal income, business income, and taxes generated by these sectors account for 68.93% of the total economy.

The following tables document the top industries affected by employment and output, as well as a listing of all industries that were analyzed.

<sup>1</sup> Article on building a contribution analysis in IMPLAN that avoids double counting: http://www.implan.com/index.php?option=com\_content&view=article&id=660%3A660&catid=253%3AKB33&Itemid=70

<sup>2</sup> Direct, indirect, and induced effects sum together to estimate the total economic contribution in the state. **Direct effects** capture the contribution from agricultural and food products. **Indirect effects** capture the economic benefit from farms and agricultural businesses purchasing inputs from supporting industries within the state. **Induced effects** capture the benefits created when employees of farms, agricultural businesses, and the supporting industries spend their wages on goods and services within the state.

<sup>3</sup> Value added = labor income + indirect business taxes + other property type income.

<sup>4</sup> GRP = final demand of households + governments expenditures + capital + exports - imports - institutional sales.

<sup>5</sup> Output = intermediate inputs + value added.

In the top ten agriculture, food, and food processing sectors by employment, the beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector is the top employer with **327 employees**. This table also shows the amount of jobs that are created by the agriculture industry in Wichita County.

Top Ten Agriculture, Food, and Food Processing Sectors by Employment				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	326.9	\$258,565,503		
Support activities for agriculture and forestry	64.2	\$2,023,234		
Wholesale trade	53.9	\$11,151,161		
Flour milling	41.8	\$56,292,225		
Grain farming	33.2	\$69,353,143		
Real estate	18.4	\$2,963,500		
Truck transportation	17.9	\$2,956,274		
Securities and commodity contracts intermediation and brokerage	17.1	\$1,119,301		
Accounting, tax preparation, bookkeeping, and payroll services	12.8	\$395,584		
Individual and family services	9.2	\$194,720		

The beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming sector directly contributes approximately \$258.6 million to the Wichita County economy. The table below also shows the amount of revenue that is generated in other industries by having a strong agriculture industry.

Top Ten Agriculture, Food, and Food Processing Sectors by Output				
Sector	Total Employment	Total Output		
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	326.9	\$258,565,503		
Grain farming	33.2	\$69,353,143		
Flour milling	41.8	\$56,292,225		
Wholesale trade	53.9	\$11,151,161		
Animal, except poultry, slaughtering	8.3	\$5,602,655		
Owner-occupied dwellings	0.0	\$4,474,190		
Animal production, except cattle and poultry and eggs	7.7	\$4,054,438		
Electric power transmission and distribution	2.4	\$2,996,824		
Real estate	18.4	\$2,963,500		
Truck transportation	17.9	\$2,956,274		

Below is a summary of all agriculture data with employment levels and output level. These values can tell how many jobs are represented by each agriculture, food, and food processing sector and the output they contributed to the Wichita County economy.

All Agriculture, Food, and Food Processing Sectors					
Sector	Total Employment	Total Output			
Oilseed farming	0.2	\$1,025,644.44			
Grain farming	33.2	\$69,353,142.94			
All other crop farming	2.1	\$857,412.71			
Beef cattle ranching and farming, including feedlots and dual-purpose ranching and farming	326.9	\$258,565,502.71			
Poultry and egg production	0.2	\$378,019.53			
Animal production, except cattle and poultry and eggs	7.7	\$4,054,438.30			
Commercial logging	0.7	\$33,553.98			
Commercial hunting and trapping	1.5	\$31,020.11			
Flour milling	41.8	\$56,292,225.50			
Animal, except poultry, slaughtering	8.3	\$5,602,655.03			
Bread and bakery product, except frozen, manufacturing	0.5	\$63,529.30			
Farm machinery and equipment manufacturing	1.9	\$735,578.46			
Landscape and horticultural services	3.4	\$157,726.05			

All 105 counties in Kansas have an IMPLAN model and an agriculture, food, and food processing contribution summary. These values do not factor in the retail environment of food sales. Food retail is important, but in order to provide the most accurate picture of what production agricultural and processing contributes to Wichita County, the retail sector was omitted.